

## Appendix C - Educational and Public Outreach Materials

### Brochures/Program Materials

Storm Water Services Division (brochure)  
Storm Water Pollution Prevention – What You Can Do At Home (brochure)  
Storm Water Pollution Prevention – Business Tips and Guidelines (brochure)  
Storm Water Pollution Prevention in the Automotive Business – Repair, Cleaning, Salvage (brochure)  
Adopt-A-Stream (brochure)  
Adopt-A-Stream Program Participants (listing used for recognition on City webpage)  
*Quality Ozark Streams* (City Utilities insert)

### Activity Announcements

Construction Specifications Institute Trade Show – “Erosion/Sediment Control & Storm Water Issues” seminar  
Springfield Regional Arbor Day Activities  
Earth Day 2005

### News Articles/News Releases

City of Springfield News Release – “Citizens Reminded to Protect Our Waterways”  
City of Springfield News Release – “City Acquires Floodplain Area”  
*Choose Environmental Excellence* Newsletter – Fall 2004 Page 3  
*Community Free Press Midweek* – “Protect our Waterways” and “Springfield Acquires Floodplain Area”  
*Springfield News-Leader* – “Splish, splash – kids get into water”  
*Springfield News-Leader* – “After 20 years, Ozarks seeing water issues more clearly”  
*Springfield News-Leader* – “Street signs let drivers know what creek they’re crossing”  
*Springfield News-Leader* – “Change in an urban wilderness”  
*Springfield News-Leader* – “Rethinking old standards of storm drainage”  
*Springfield News-Leader* – “Now, it’s up to you to clean streams”  
*Springfield News-Leader* – “Program aims to keep streams clean”  
*Springfield News-Leader* – “Program encourages residents to clean up Ozarks streams”

## Storm Water Improvement Projects

The Division develops projects to reduce flood hazards and improve storm water quality. There are three categories of storm water improvement projects:

- **Bond Issue Projects:** These projects are funded by storm water bond issues, funded through a Level Property Tax approved by voters. Voters approved the Level Property Tax in 1995, 1999, 2001, and 2004.
- **Detention Buyout Fund Projects:** These projects are funded by payments made by developers in lieu of constructing storm water detention facilities when appropriate. These funds are used by the City to construct and maintain regional storm water detention and drainage systems within the drainage basin where the development occurred.
- **Floodplain Acquisition Program:** Storm water bond issue funds allocated for this program are used to make voluntary acquisitions of flood-prone properties and undeveloped acreage within sinkhole boundaries and along riparian (stream) corridors. These acquisitions provide benefits to the public in terms of flood control, wildlife habitat, recreational uses, and enhanced water quality. These acquisitions are often done in conjunction with the development of greenway trails.

In addition to these project funding sources, the Division also seeks out federal and state grants to fund storm water improvements.

## GIS Mapping

The Division develops and maintains GIS (Geographic Information System) mapping and inventory of the City's storm water drainage system. Mapping of the system is a valuable tool for storm water management.

The Division continually develops improved mapping of flood hazard areas along waterways and within sinkholes. The *Springfield Area Watersheds and Sinkholes* map shows the boundaries and watersheds of over 250 sinkholes within the City as well as major watershed boundaries. This map is a valuable tool in implementing the City's Water Quality Protection Policy for development in sinkhole and designated sensitive watersheds. This map is available for purchase from the Division.

## Public Education

The Division provides storm water education and public outreach through displays at community events, presentations to area audiences, and utilization of media and publications opportunities.

Visit the Storm Water Services Division website at  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)



Storm Water Services Division  
Department of Public Works  
Busch Municipal Building  
840 Boonville Avenue  
PO Box 8368  
Springfield, MO 65801-8368  
Phone (417) 864-1901 Fax (417) 864-1907  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)

## The Storm Water Services Division of Public Works provides a variety of services, including:

- Storm water plan review on all new developments
- Responding to requests for services related to storm water problems
- Compliance with the City's federally mandated NPDES water quality permit
- Developing Watershed Master Plans
- Developing projects to reduce flood hazards
- Developing flood hazard maps for waterways and sinkholes
- GIS mapping of the City's storm water system and streams
- Conducting a variety of storm water studies
- Monitoring rainfall and runoff
- Public education and involvement on storm water issues

To report spills, dumping or discharges of pollutants to the storm water drainage system, including streets or waterways, call the Storm Water Services Division at 864-1901 or submit a service request online at [www.springfieldmogov.org](http://www.springfieldmogov.org).

## Plan Reviews

The Division reviews all site development plans for adherence to the City's storm water design criteria. Both commercial site plans and residential subdivision plans are reviewed by Storm Water Services. Storm water design criteria are continually being updated to remain current with standard practices.

## Service Requests

The Division responds to requests for services related to flooding and water quality concerns. A service request can be submitted online at [www.springfieldmogov.org](http://www.springfieldmogov.org) or by calling (417) 864-1901.

## NPDES Permit Compliance

The City's National Pollutant Discharge Elimination System (NPDES) Permit, a federally mandated water quality permit, requires the City to develop a Storm Water Management Program to reduce pollutants in storm water runoff and reduce illicit discharges to the storm water drainage system.

Storm water runoff can contain pollutants such as sediment from erosion of soil; phosphorus and nitrogen from fertilizers, grass clippings and leaves; bacteria from animal waste; and other pollutants such as petroleum products or metals from automobiles and industrial activity.

Some of the activities of the City's Storm Water Management Program include the following.

- Sampling and monitoring of streams and storm water runoff
- Field screening to detect illicit discharges to the storm water system
- Inspection and maintenance of the storm water drainage system

Developers and businesses play an important role in reducing the discharge of pollutants to the storm water system. Commercial and industrial activities need to be conducted in compliance with federal and state regulations and the City Code to protect water quality. These types of activities include:

- Erosion and sediment control on construction sites
- Washing of building exteriors, parking lots, vehicles, and other equipment
- Outdoor storage or exposure to storm water of items that can be sources of pollutants

The Division provides information and enforcement of regulations and guidance on storm water Best Management Practices (BMPs).

## Watershed Master Plans

The Division is continually developing Watershed Master Plans to provide guidance in meeting flood control and water quality objectives.

## Vehicle Maintenance

Regularly inspect your vehicles for oil leaks. If conducting vehicle maintenance at home, work on a concrete or other hard surface so spills can be easily cleaned up. Recycle used motor oil, oil filters, and antifreeze. These items are accepted at the City's Household Chemical Collection Center and at several local retailers listed in the City's Recycling Guide. Call the Recycling Hotline at (417) 864-1904 or visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling).

## Dispose of Wash Waters Properly

Dispose of wash waters from paint cleanup, mopping, or similar washing activities to an indoor sink, never to the street or storm drain. Water from power washing activities should be directed to a grassy area to minimize runoff. If power washing is being done to remove paint or other chemicals, special consideration should be given to handling the wash waters to prevent pollution. Call the Storm Water Services Division at (417) 864-1901 for guidelines.



Never wash paint rollers in the storm drain

## Pollution Reporting

To report spills, dumping or discharges of pollutants to the street, storm water system or streams, call the Storm Water Services Division at (417) 864-1901 or submit a Citizen Service Request at [www.springfieldmogov.org](http://www.springfieldmogov.org).

For spill emergencies after normal business hours, please contact the Springfield Fire Department.

## What to Watch For:

- Dumping of motor oil or other chemicals
- Discharges of commercially generated wash waters (i.e. from washing of vehicles, equipment or structures, or from services such as carpet cleaning)
- Improper outdoor storage of chemicals and other materials that can pollute the ground or storm water runoff
- Sediment discharging from construction sites, or other erosion problems

For more information on these or other storm water topics, please call the Storm Water Services Division at (417) 864-1901 or visit [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater).

*The National Pollutant Discharge Elimination System (NPDES) program is a federal permitting program mandated by the Clean Water Act. The City of Springfield received its NPDES storm water permit in July 2002. The City is committed to the responsibility established by the permit to reduce pollutants in storm water runoff and reduce illicit discharges to the storm water system.*



# Storm Water Pollution Prevention



## What You Can Do At Home

Storm Water Services Division  
Department of Public Works  
Busch Municipal Building  
840 Boonville Avenue  
PO Box 8368  
Springfield, MO 65801-8368  
Phone (417) 864-1901 Fax (417) 864-1907  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)

## Storm Water Pollution Prevention At Home

### Did You Know...

The storm water drainage system is separate from the sanitary sewer system (indoor sink and floor drains, and toilets). The sanitary sewer system goes to one of the City's two wastewater treatment plants whereas the storm water drainage system goes directly into area streams, rivers and lakes.

Storm water runoff can contain many kinds of pollutants including sediment from erosion of soil; nutrients such as phosphorus and nitrogen from fertilizers, grass clippings and leaves; bacteria from animal waste or decaying vegetation; or other pollutants such as petroleum products and metals from automobiles and industrial activity.

## How You Can Help

The following are simple but effective things you can do to protect the water quality of our streams and lakes through storm water pollution prevention.

### Minimize Runoff

Direct gutter downspouts to grassy areas instead of pavement to slow runoff and allow the vegetation to act as a natural filter for pollutants.

### Pick Up After Your Pets

Pick up after your pets and dispose of the waste in the trash. Pet waste contains bacteria and nutrients that can degrade water quality.

### Vehicle Washing

If washing your vehicle at home, do so in a grassy area to minimize runoff and allow for natural filtration of pollutants. Use a phosphate-free, biodegradable soap. Consider using a commercial car wash instead. Wash waters at commercial car wash facilities go to the sanitary sewer system.

### Sweep, Don't Hose

Sweep instead of hosing off driveways and other paved surfaces. Not only does this conserve water, it prevents runoff of sediment, oil residue and other pollutants. If hosing off surfaces, sweep up visible sediment and debris first and direct the runoff to a grassy area, not to the street or storm drain.

### Lawn Care

Practice environmentally friendly lawn care. Minimize the use of fertilizers and pesticides. A simple soil test will tell you if your lawn needs fertilizer. Applying excess fertilizer is a waste of time and money and adds harmful nutrients to streams. To learn more about soil tests call the University of Missouri Extension Office at 862-9284. Call Show-Me Yards & Neighborhoods (SMY&N) at (417) 864-2006 or visit [www.springfieldmogov.org/community/cee\\_showme](http://www.springfieldmogov.org/community/cee_showme) for more information about

environmentally friendly lawn care, including information on how your yard can become a certified Show-Me Yard and a list of SMY&N certified professionals.

### Dispose of Yardwaste Properly

Properly dispose of yardwaste by composting or taking it to the City's recycling centers. Yardwaste in streets and ditches leads to increased flooding and degrades water quality. Decaying vegetation in waterways depletes dissolved oxygen levels necessary for healthy aquatic life and is a source of nutrients that can cause algae growth. For more information, call the City's Recycling Hotline at (417) 864-1904 or visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling).

### Dispose of Household Chemicals Properly

Minimize the use of household chemicals and consider nontoxic alternatives. Properly dispose of unwanted household chemicals such as pesticides, cleaners and paint by bringing them to the City's Household Chemical Collection Center (HCCC). The HCCC is available to residents of Springfield/Greene County free of charge. Over 80% of materials brought to the HCCC are recycled and the remainder are disposed of in an environmentally safe manner. For more information, call the City's Recycling Hotline at (417) 864-1904 or visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling).



If your business contracts with a mobile washing service, make sure they are not discharging wash waters from your property into the street or storm drain.

If you have questions regarding specific washing activities, please contact the Storm Water Services Division at 864-1901.

### Lawn Care

The Show-Me Yards & Neighborhoods (SMY&N) program offers environmentally responsible alternatives to traditional lawn care practices that can contribute to excess nutrients and pollutants in storm water runoff. By implementing these alternatives, businesses can receive recognition as a certified Show-Me Yard. Many local lawn care professionals have completed SMY&N training. Ask your lawn care professional or contact the SMY&N program for a list by calling (417) 864-2006 or visiting [www.springfieldmogov.org/community/see\\_showme](http://www.springfieldmogov.org/community/see_showme).

### Pollution Reporting

To report spills, dumping or discharges of pollutants to the street, storm water system or streams, call the Storm Water Services Division at (417) 864-1901 or submit a Citizen Service Request at [www.springfieldmogov.org](http://www.springfieldmogov.org). For spill emergencies after normal business hours, please contact the Springfield Fire Department.

### What to Watch For:

- Dumping of motor oil or other chemicals
- Discharges of commercially generated wash waters (i.e. from washing of vehicles, equipment or structures, or from services such as carpet cleaning)
- Improper outdoor storage of chemicals and other materials that can pollute the ground or storm water runoff
- Sediment discharging from construction sites, or other erosion problems

For more information on these or other storm water topics, please call the Storm Water Services Division at (417) 864-1901 or visit [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater).

*The National Pollutant Discharge Elimination System (NPDES) program is a federal permitting program mandated by the Clean Water Act. The City of Springfield received its NPDES storm water permit in July 2002. The City is committed to the responsibility established by the permit to reduce pollutants in storm water runoff and reduce illicit discharges to the storm water system.*



## Storm Water Pollution Prevention



## Business Tips and Guidelines

Storm Water Services Division  
Department of Public Works  
Busch Municipal Building  
840 Boonville Avenue  
PO Box 8368  
Springfield, MO 65801-8368  
Phone (417) 864-1901 Fax (417) 864-1907  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)

## Storm Water Pollution Prevention At Your Workplace

### Did You Know ...

The storm water drainage system is separate from the sanitary sewer system (indoor sink and floor drains, and toilets). The sanitary sewer system goes to one of the City's two wastewater treatment plants whereas the storm water drainage system goes directly into area streams, rivers and lakes.

Storm water runoff can contain many kinds of pollutants including sediment from erosion of soil; nutrients such as phosphorus and nitrogen from fertilizers, grass clippings and leaves; bacteria from animal waste or decaying vegetation; or other pollutants such as petroleum products and metals from automobiles and industrial activity.

### How You Can Help

The following are simple but effective things you can do at your workplace to protect the water quality of our streams and lakes through storm water pollution prevention.

### Minimize Runoff

Direct gutter downspouts to grassy areas instead of pavement to slow runoff and allow the vegetation to act as a natural filter for pollutants. Reducing runoff reduces the possibility for pollutants to be carried by runoff to area streams and lakes.

### Good Housekeeping

- Routinely pick up litter and debris in and around parking lots and buildings.
- Store chemicals and other materials inside.
- Have spill cleanup materials handy near the dumpster and loading dock areas.
- Do not place leaking containers or garbage bags into the dumpster.
- Keep dumpster lids closed to keep out rainwater and prevent trash from spilling out.
- Don't hose out dumpsters. Ask the service provider to switch out the dumpster for cleaning and to replace or repair leaky dumpsters.
- Keep dumpsters locked to prevent illegal dumping.
- Clean floor mats, filters and garbage cans in a mop sink or floor drain, not outside.
- Dispose of mop water into a sink or floor drain, not outside.

### Proper Disposal of Wash Waters

Springfield City Code Sec. 96-28 prohibits the discharge of wash waters to the street or storm drain with the following exception:

- Wash waters from parking lot and sidewalk cleaning operations after all visible debris and sediments have been removed prior to washing.

Consider water conservation when deciding if hosing down parking lots or sidewalks at your workplace is necessary. If so, the area should be swept first to ensure that discharging this water is not a violation of City Code Sec. 96-28.

The discharge of water to the street or storm drain from other types of washing activities such as washing or power spraying of vehicles, equipment, or structures is prohibited. The best option is to use a commercial car wash or to use an indoor wash bay with a sanitary sewer drain. If washing is done outside, the water must not discharge from the property. If wash waters will discharge from the property or if washing is to remove paint or other chemicals, wash waters must be collected and disposed to the sanitary sewer in compliance with the City's Wastewater Regulations. Prior approval for methods used to divert wash waters to the sanitary sewer must be obtained from the Sanitary Services Division at (417) 864-1923.

Visit the Storm Water Services Division website at  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)

instead of hosing them off. Any rinse waters generated in the shop should go to a sanitary sewer drain.

- Sanding dust and/or residue from other chemicals and processes used during auto body repair and detailing often remain on the vehicle after the body work is completed. Use dry cleanup methods such as vacuuming to remove all visible dust. Vehicle washing should be done at a commercial car wash or inside the shop with a floor drain connected to the sanitary sewer.

### **Auto Salvage and Recycling Operations**

Motor vehicle salvage yards and auto/truck recycling operations that store more than fifty vehicles at any one time or recycle, dismantle, or otherwise process more than fifty vehicles in any twelve month period must obtain a storm water discharge permit from the Missouri Department of Natural Resources.

The auto recycling industry is very important to the environment.

Automobiles are the number one recycled product in America. However, if salvaged vehicles are handled without care, storm water pollution and other environmental damage can result. Below are some ways to protect our waterways and environment.

- Visually inspect vehicles entering the facility for leaks. Use drip pans or absorbent materials to contain leaks. Clean up any residues on the

ground.

- Clean up spills or leaks immediately. Maintain an adequate supply of spill cleanup materials such as oil dry and absorbent pads.
- Upon dismantling and before crushing of vehicles, remove batteries, fluids, and fuels.
- Store vehicle fluids and fuels in an area that is not exposed to storm water. Arrange for services to properly dispose of waste materials.
- Before crushing, remove mercury switches (used in trunk and hood lights and other applications on some vehicles). Visit [www.epa.gov](http://www.epa.gov) for guidelines on removal of switches.



## **Storm Water Pollution Prevention**

in the

## **Automotive Business** Repair, Cleaning, Salvage



For more information on these or other storm water pollution prevention topics, please call the Storm Water Services Division at (417) 864-1901 or visit [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater).

*The National Pollutant Discharge Elimination System (NPDES) program is a federal permitting program mandated by the Clean Water Act. The City of Springfield received its NPDES storm water permit in July 2002. The City is committed to the responsibility established by the permit to reduce illicit discharges to the storm water system and improve the quality of Springfield's storm water runoff.*

Storm Water Services Division  
Department of Public Works  
Busch Municipal Building  
840 Boonville Avenue  
PO Box 8368

Springfield, MO 65801-8368  
Phone (417) 864-1901 Fax (417) 864-1907  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)



## Storm Water Pollution Prevention in the Automotive Business

Did you know that runoff that flows into streets and storm drains ends up in area streams and lakes? Unlike wastewater from the sanitary sewer system which goes to Springfield's two wastewater treatment plants, discharges to the storm water system do not receive treatment.

Polluted runoff is a water quality concern for our streams and lakes. Runoff can contain pollutants from many different sources, including automotive repair, cleaning, and salvage activities.

## How Your Business Can Help

### Obtain Required Permits

The following types of facilities need to obtain a storm water discharge permit from the Missouri Department of Natural Resources:

- Motor freight (trucking) transportation and warehousing facilities that conduct vehicle maintenance (including fueling) or equipment cleaning operations
- Motor vehicle salvage yards and auto/truck recycling operations that store more than fifty vehicles at any one time or recycle, dismantle, or otherwise process more than fifty vehicles in any twelve month period

### Follow Washing Guidelines

The discharge of wash waters other than from residential car washing is prohibited by federal regulations and the Springfield City Code. If possible, washing activities should be done at a commercial car wash facility or in a wash bay that drains to the sanitary sewer. Mobile wash businesses and facilities conducting washing activities in areas where the water is not contained and disposed of to the sanitary sewer need to follow these guidelines unless the wash water discharge is permitted by the Missouri Department of Natural Resources.

- Wash waters must not discharge from the property where the washing is occurring (i.e. into the street or storm drain or onto adjacent property) and should be directed into a grassy area when possible. Do not use soap, or if necessary, use only phosphate-free, biodegradable soap.
- If one or more of the following conditions applies, wash waters must be contained and disposed of to the sanitary sewer in compliance with the City's Wastewater Regulations. Prior approval of methods used to divert wash waters to the sanitary sewer must be obtained from the Sanitary Services Division at (417) 864-1923.
  - If soap or chemicals are used.
  - If the washing is being done to remove a chemical

- substance or residue.
- If 500 or more gallons of water is used, or a lesser amount is used and the wash waters will discharge from the property.

### Recognize and Eliminate Possible Pollutant Sources

In addition to implementing the pollution prevention tips below, learn to recognize what other practices or situations at your business can lead to polluted runoff.

- Make sure shop floor drains are connected to the sanitary sewer, not the storm water system.
- When receiving vehicles for repair, inspect for leaks and use drip pans if needed.
- Clean up any spills with proper absorbent materials. Don't wash down oil spills or absorbent materials into the street or storm drain.
- Store used fluids or other materials in a covered area not exposed to storm water. Consult Springfield's Recycling Guide for where to recycle antifreeze and used motor oil. Call the Recycling Hotline at (417) 864-1904 or visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling).
- Conduct all body repair and painting work indoors. Use dry cleanup methods when possible, such as wiping down parts and work areas

## Think Safety

- Do not conduct a cleanup immediately after a storm when water levels are high; wait until water levels recede.
- Wear heavy gloves
- Wear rubber boots or waders when in the water
- Wear proper clothing for the season and proper shoes for rough terrain
- Stop work in inclement weather
- Be alert for holes and obstacles
- Watch footing when working on slopes and in the water
- Be alert for snakes
- Avoid contact with noxious weeds such as poison ivy
- Avoid overexertion
- Have drinking water handy while working to prevent dehydration
- Provide at least one adult supervisor per four children
- Keep children in sight at all times
- If items indicating illegal activity, such as syringes, are found continually in one place, please call (417) 864-1996.
- Do not try to remove large items such as appliances without proper equipment.
- Have a first-aid kit readily available
- Have transportation readily available

## Pollution Reporting

To report spills, dumping or discharges of pollutants to the street, storm water system or streams, call the Storm Water Services Division at (417) 864-1901 or submit a Citizen Service Request at [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater). For spill emergencies after normal business hours, please contact the Springfield Fire Department.

### What to Watch For:

- Dumping of motor oil or other chemicals
- Discharges of commercially generated wash waters (i.e. from washing of vehicles, equipment or structures, or from services such as carpet cleaning)
- Improper outdoor storage of chemicals and other materials that can pollute the ground or storm water runoff
- Sediment discharging from construction sites, or other erosion problems

## Thank You!

Your volunteer efforts keep our streams clean, protect water quality and encourage positive community involvement. Thank you for your commitment to improving the quality of life in Springfield!



Storm Water Services Division  
Department of Public Works  
Busch Municipal Building  
840 Boonville Avenue  
PO Box 8368  
Springfield, MO 65801-8368  
Phone (417) 864-1901 Fax (417) 864-1907  
[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)



The Adopt-A-Stream program recognizes the commitment of citizens to keep our City's streams free from litter and debris. Individuals, community groups, business owners, schools, churches and service clubs are invited to participate.

A stream available for adoption may be a major stream, or a tributary or drainageway that is dry at times but in need of periodic cleanup. Groups may have a stream segment in mind or may choose from an adoption list. Written permission must be obtained from property owners for stream segments not owned by the City.

---

*"If there is magic on the planet  
it is contained in the water."*

- Loren Eiseley

## What are the Volunteers Responsibilities?

- Adopt a minimum of 0.5 mile of stream. Exceptions may be made in cases where safety or accessibility issues necessitate a shorter length and as long as the segment is in need of adoption.
- Conduct cleanup (litter removal) of the adopted stream segment at least 3 times per year.
- Keep the City informed of your cleanups.

Organizations are required to participate for at least one full year. Adoption is renewable annually given that program requirements are met.

## What does the City provide?

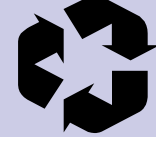
- Provide trash bags.
- Provide pick up and disposal of the filled bags.
- Install Adopt-A-Stream sign at the adopted stream segment, recognizing the volunteer group's efforts.
- Recognize volunteer groups on the City's website at [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater).

## How to Adopt

- Call (417) 864-1996 to request information.
- Once your application forms have been received and approved, you will be notified that you may begin cleanups.

## How to Conduct a Cleanup

- Trash bags can be picked up from the Storm Water Services Division, Busch building 2nd floor, 840 Boonville.
- Leave filled trash bags on the closest street right-of-way for pick up by the City.
- Record the number of bags for reporting to the City.
- When a cleanup has been completed, call 864-1996 to report the number of bags and arrange for pick up.



## Recycle!

Collect recyclable materials in separate bags and take them to the nearest recycling center. For locations, visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling).



## Program Participants

The volunteer efforts of the following groups keep our streams clean, helping to protect water quality and encourage positive community involvement. Thank you for your commitment to improving the quality of life in Springfield!

**Greater Ozarks Audubon** – South Creek from National to Campbell (1 mile)

**Larry Turley and Donovan Clemens** – Wilsons Creek from James Ewing Sports Complex to west of Scenic (0.9 miles)

**Precision Imageworks.com** – South Creek from Weaver to Kansas Expy (0.5 miles)

**Suzy and Steve** – Galloway Creek from north of Lacuna to Barton (0.5 miles)

**Jamie and Sarah Sharon** – Jordan Creek from Mt. Vernon to Grand (0.6 miles)

**Christian Kiefer** – South Creek from Golden through Carver Middle School (0.6 miles)

**Dale St. Methodist Church** – Jordan Creek North Branch through Smith Park and city-owned open channel sections upstream to Glenstone and downstream to National (0.5 miles)

**Arc of the Ozarks** – South Creek from Campbell to Weaver (0.5 miles)

**The Ozarks Christian News** – Jordan Creek North Branch in Silver Springs Park (0.6 miles)

**Libertarian Party** – Tributary of Pea Ridge Creek and drainage in Doling Park (0.5 miles)

**N. McCaulley, Ent** – Jordan Creek South Branch from Elmwood Street west to 100ft. east of Chestnut Expy (omitting 2244 E. Pythian) (0.5 miles)

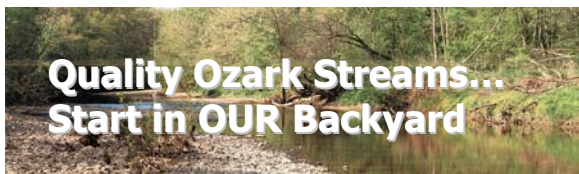
**Bank of America** – Fassnight Creek from Bennett to Grant (0.7 miles)

**F.O.M.E. (Friends of Mother Earth) Christina, Kelly, Mike & LK** – Galloway Creek from Battlefield south to RR and James River Freeway south to Springfield Lake (0.5 miles)

**Watershed Committee of the Ozarks** – South Dry Sac from Farm Road 171 west through Parks Department property (0.6 miles)

**N. McCaulley, Ent** – Wilsons Creek in Rutledge-Wilson Park (0.9 miles)

**E. Chernesky & Friends** – Galloway Creek from Covington to Battlefield (0.6 miles)



### Did you know?

The City of Springfield is now in its third year of operation under the City's National Pollutant Discharge Elimination System (NPDES) storm water permit, a federally mandated water quality permit that gives the City the responsibility to develop a plan to reduce pollutants in storm water runoff.

### What kind of pollution is in storm water runoff?

Storm water runoff can contain sediment from erosion of soil; phosphorus and nitrogen from fertilizers, grass clippings and leaves; bacteria from animal waste; and many other pollutants such as petroleum products or metals from automobiles and industrial activity. **Storm water runoff does NOT go to a treatment facility.**

### One Person Can Make a Difference. Here's How . . .

#### Dispose of yardwaste properly.

Placing grass clippings, leaves and other yardwaste in streets and ditches is a City ordinance violation, increases flooding and degrades water quality. Consider composting or using the City's Yardwaste Recycling Center.

#### Dispose of household chemicals properly.

Motor oil, pesticides and paints are examples of many household chemicals that can harm our streams or groundwater if placed in the storm water system or on the ground. Residents of Springfield/Greene County may take these items to the City's Household Chemical Collection Center at no charge.

Call the City's Recycling Hotline at **864-1904** or visit [www.springfieldmogov.org/recycling](http://www.springfieldmogov.org/recycling) for more information about recycling. Call Storm Water Services at 864-1901 or visit [www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater) to learn more about storm water issues.

### Fertilize smart!

A simple soil test will tell you if your lawn needs fertilizer. Applying excess fertilizer is a waste of time and money and adds harmful nutrients to streams. To learn more about soil tests call the MU Extension Office at **862-9284**. To learn more about environmentally friendly lawn care, call Show-Me Yards and Neighborhoods at **864-2006** or visit [www.springfieldmogov.org/community/cee\\_showme](http://www.springfieldmogov.org/community/cee_showme).

### Help watch for illegal dumping.

To report spills, dumping or discharges of pollutants to the storm water system or streams call Storm Water Services at 864-1901 or submit a Citizen Service Request at [www.springfieldmogov.org](http://www.springfieldmogov.org).

### What to Watch For:

- Dumping of motor oil or other chemicals
- Discharges of commercially generated wash waters to streets, ditches or storm drains
- Improper outdoor storage of chemicals and other materials that can pollute
- Sediment discharging from construction sites, or other erosion problems

### Inquire about good storm water practices.

Developers and businesses can help by following good storm water practices when conducting the following types of activities:

- Washing of building exteriors, parking lots, vehicles, or other equipment
- Pumping of rain water from construction sites
- Outdoor storage or exposure to storm water of items that can be sources of pollutants

### Plant trees.

Trees play a vital role in maintaining the water quality in our community. Trees can catch and slow rainfall, reducing the amount of runoff and allowing more infiltration to groundwater. More information is available at [www.arboday.org](http://www.arboday.org) or visit [www.springfieldmogov.org/grounds/treecity](http://www.springfieldmogov.org/grounds/treecity) to learn about programs in Springfield designed to get more trees planted.



Department of Public Works



Printed on  
recycled paper



# Southwest Missouri Chapter

# CSI

A Publication of the Southwest Missouri Chapter, Construction Specifications Institute

January 2005

Volume 10 Issue 1

**Thursday**  
**January 27**

3:00 p.m.—8:00 p.m.

**University Plaza**  
**Hotel**

**Product & Trade**  
**Show**  
**Seminars**

Each session is one (1) hour  
Beginning at 3:30 p.m. and 5:30 p.m.

Erosion/sediment control  
& storm water issues

"Are you insurance poor"  
Individual vs. Company Liability

Seminar registration required:  
Call Brad or Jason Weaver at 417-890-5906  
There is no cost for the trade show or seminars

## January Trade Show

**Date:** January 27, 2005  
**Time:** 3:00 p.m. – 8:00 p.m.  
**Place:** University Plaza Hotel  
333 John Q. Hammons Parkway

Seminars will provide one hour continuing education credit each

Seminars are **free** to qualified persons—Registration required—  
call : 890-5906

Trade show is **free** and open to all in the design and construction industry.



Advancement  
of Construction  
Technology

*Southwest Missouri Chapter*

A certified provider of Continuing Education credits

## January Board Meeting

**Date:** Wednesday, January 19  
**Time:** 4:30 P.M.  
**Place:** Springfield City Hall  
Busch Building  
2nd Floor East Conf. Room



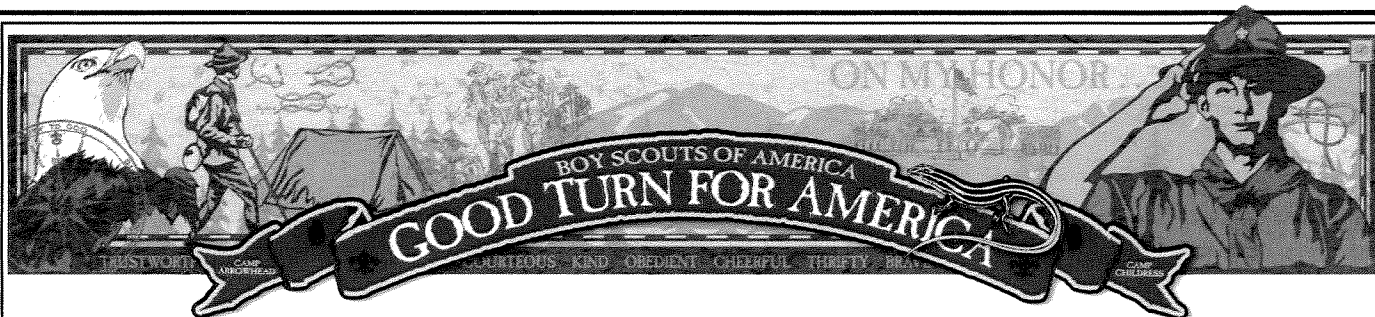
**\* \* \* For Immediate Release - March 31, 2005 \* \* \***

## **Springfield Regional Arbor Day Activities**

A variety of tree related activities are being planned for Springfield and area communities throughout the month of April. Missouri Arbor Day is Friday, April 1<sup>st</sup>. Springfield will celebrate Arbor Day on Friday, April 8<sup>th</sup>. National Arbor Day is Friday, April 29<sup>th</sup>. The southwest region of the Missouri Community Forestry Council, the Springfield Tree City U.S.A. Citizens' Advisory Committee, City of Springfield Public Works, City Utilities, Missouri Department of Conservation and Ozark Greenways, are all working to promote area Arbor Day activities. The public is invited to get involved! **For general questions, call Alan Moore, Urban Forester (417) 864-1135.**

- All of April** City of Springfield - Arbor Day display in display case at Busch Building, 840 N. Boonville, 1<sup>st</sup> floor, weekdays 8am-5pm.
- Friday, April 1, 3 PM** City of Bolivar - Greenwood Cemetery, 411 S. Dunnegan. Arbor Day Tree planting  
Contact: Patricia Schneider, (417) 328-0273
- Saturday, April 2, 12 PM (noon)** City of Marshfield - First time Tree City USA designation, Rotary Park, Hwy A. Citywide tree planting.  
Contact: Neva Schroder, (417) 859-3506
- Saturday, April 2, 10 AM** City of Ozark - Neal Grubaugh Park. Tree planting, Tree ID hike, Tree Scavenger hunt, paper drive.  
Contact: Ozark Parks Department, (417) 581-7002
- Thursday, April 14** City of Willard - Tree planting  
Contact: City Hall (417) 742-3033
- Saturday, April 16** City of Exeter - Tree City USA designation  
Contact: City Hall (417) 835-2823
- Thursday, April 21, 4:00PM** City of Springfield will receive the **2004 Tree City USA Award for the 20<sup>th</sup> consecutive year** and City Utilities will receive the **2004 Tree Line USA award!** Ceremony will be at the East Plaza of the Jordan Valley Ice Park.  
Contact: Roger Sieloff, CU, (417) 831-8728 and Alan Moore, Urban Forester, (417)864-1135
- Friday, April 29, 10:30 AM** City of Branson - Tree City USA Award 10<sup>th</sup> year and Tree City USA Growth Award 7<sup>th</sup> year presentation and tree planting at Old School Park, W Hwy 76. City will be planting a white oak and a redbud.  
Contact: Cheryl Verdeyen, City Forester, (417) 337-8544
- Friday, April 29, 3:30 PM** Ozark Greenways - Urban Trees mural phase II "Final Touch Paint Party". Under the Martin Luther King, Jr. Bridge along Jordan Valley Park Greenway in Springfield.  
Contact: Terry Whaley, Ozark Greenways, (417) 864-2014
- Springfield Public Works Tree Plantings with 5<sup>th</sup> grade classes** Contact: Alan Moore, Urban Forester, 864-1135

Monday, April 4, 1:30 PM	Pleasant View Elementary	2210 E. State Hwy AA
Tuesday, April 5, 10:30 AM	Horace Mann Elementary	3745 S. Broadway
Tuesday, April 5, 1:30 PM	McGregor Elementary	1221 W. Madison
Wednesday, April 6, 9:30 AM	Hickory Hills Elementary	3429 E. Trafficway



## 2005 Environmental Stewardship

### Earth Day at the Discovery Center

Saturday, April 23

10:00 AM - 4:00 PM open to the public

- Choose Environmental Excellence Display
- Show-me Yards & Neighborhoods Display
- Springfield/Greene - Solid Waste Division Display - Let's Go Shopping Activity
- Watershed Committee of the Ozarks - "Display & Wheel of Environment"
- Computer Recycling Center - Computer Demonstration & Display
- Wilson's Creek National Battlefield, Ted Hilmer - "Fuel Efficient Transportation/Morning"
- Discovery Center - "Enviroscape & Green Building"
- Discovery Center - Geology & Geographic Information System
- Nestle Purina Pet Care Company - Display
- James River Basin Partnership, Steve Matthews - Water Sampling Program
- Missouri Department of Natural Resources - Groundwater Demonstration
- Ozark Greenways - Display
- Commercial Metals - "Recycling Demonstration"
- City Utilities of Springfield - Display
- Wonders of Wildlife - Interactive Exhibit
- "The Fishin' Magician" - 10:30 am - 2 pm

### Lake Springfield Pavilion

Saturday, April 23

10:00 AM - 4:00 PM open to the public

Exhibits will be set up as interactive activity stations.

- Springfield/Greene County Parks & Recreation, Melvin Johnson - Cave Program
- Missouri Department of Conservation, Jay Barber - Animal & Plant Identification & Activities
- 2nd & 1st Class Scout Advancement Activity & Kims Game "Scavenger Hunt"
- Springfield Missouri Public Works, Alan Moore - "Tree Planting Activities"
- Leave No Trace, Gary Gift & Order of the Arrow - "Training & Planning for Certification"
- U.S. Forest Service, Gary Smith - Tree Identification & Habitats & Forestry Preservation
- James River Basin Partnership, Holly Neill - Water Testing Activities
- Missouri Department of Natural Resources, Marsha Boone - Water Sampling Training
- Springfield Public Works, Solid Waste Management Division - Recycling Activity
- Wilson's Creek National Battlefield, Ted Hilmer - "Fuel-Efficient Transportation / Afternoon"
- Don Wessel Honda - Fuel-Efficient Hybrid Automobile
- Utilities of Springfield - Roger Sietloff "Tree Planting Workshop"

### CAMPING AT LAKE SPRINGFIELD



Camp Site - Move In - 4:00 PM - 8:00 PM Friday, April 22  
Move Out - 10:00 AM April 24, 2005

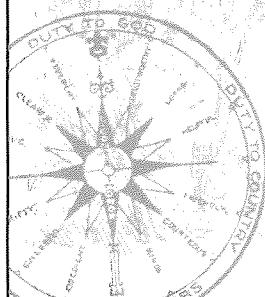
Campsite has latrine & potable water. Several fire grills & one large fire pit. Camp conservatively!

- Ceremonial Campfire - Saturday Night, April 23, Dusk - Large Fire Pit. A special presentation by the Lone Bear Spirit Dancers.
- Scouts Own Sunday Morning Prior to Move Out

For Information & Maps Contact:

Dean Price [waltzingbear@sbcglobal.net](mailto:waltzingbear@sbcglobal.net)

Media Contact: J. Howard Fik at 417.863.3900, or email at [fisklimo@aol.com](mailto:fisklimo@aol.com)



# Earth Day 2005

## **Saturday, April 9**

### **Tom Watkins Neighborhood Clean-Up**

Contact: Community Partnership of the Ozarks - 833-2020

## **Tuesday, April 12**

### **TreeKeepers tree planting activity**

Fullbright Landfill

Contact: Ozark Greenways, Inc. - 864-2015



EARTH DAY 2005

## **Saturday, April 16**

### **Work Projects Coordinated by the Springfield Conservation Nature Center**

Adult supervision required for all projects - Contact: 888-4237

*Conservation Crew* - Fishing access clean-up - Ages 18 - adult

*Garden Group* -- Nature Center Entrance Flower Bed - Ages 10 - adult

*Trail Chippers* -- Woodchip a portion of Nature Center Trail - Ages 7 - adult

*Little Acorn Chippers* -- Help woodchip the Wildlife Viewing - Area Ages 3 - 6

### **Trail Maintenance, Lake Clean Up**

Watershed Center at Valley Water Mill -- 9:00 a.m. - 2:00 p.m.

Contact: Watershed Committee of the Ozarks -- 866-1127

### **Neighborhood Clean-ups**

Heart of the West Side & Midtown

Contact: Community Partnership of the Ozarks - 866-2020

## **Sunday, April 17**

### **Tour Watershed Center at Valley Water Mill - 10:00 a.m. - 2:00 p.m.**

Contact: Watershed Committee of the Ozarks - 866-1127

## **Tuesday, April 19**

### **TreeKeepers tree planting activity**

Fullbright Landfill

Contact: Ozark Greenways, Inc. - 864-2015

## **Thursday, April 21**

### **Tree City, USA, Citizen Advisory Committee Award Presentation**

4:00 p.m. Jordan Valley Ice Park - Second Level Lobby

Dedication of Liberty Elms on Trafficway honoring original Committee's founding members

Presentation of Tree Line Award to City Utilities of Springfield

Presentation of Tree City, USA, 20<sup>th</sup> Year Award to City of Springfield

Recognition of Carolyn Gerdes - Arbor Award of Excellence

Contact: Alan Moore 864-1135



TREE CITY USA.

## **Friday, April 22, 2005 - Earth Day # 35!**

### **Choose Environmental Excellence Awards Luncheon -- Noon**

Springfield Area Chamber of Commerce

862-5567 for reservations

Information contact: Barbara Lucks - 864-2005

### **Watershed Committee Activities**

Kiosk unveiling, book collection donated, book bags premiered

Loring Bullard book signing -- The Library Center 9:30 - 10:30 a.m.

The Watershed Committee - 866-1127 for more information

# Earth Day 2005

- \*Discovery Center
  - \*Enviroscape
  - \*Green Building
  - \*Global Positioning Systems (GPS)/Global Information Systems (GIS)
- \*Nestle Purina PetCare Company - Recycling Display
- \*James River Basin Partnership
- \*Ozark Greenways, Inc.
- \*Missouri Department of Natural Resources - Groundwater Demonstration
- \*Commercial Metals Company - Recycling Display
- \*City Utilities of Springfield
- \*Springfield Conservation Nature Center
- \*ArborCare of the Ozarks - Educational Display
- \*Solid Waste District "O"

## Entertainment: \*Fishin' Magicians

\*Stage Show 10:30 a.m. - 11:00 a.m.

\*\*"Strolling Entertainment" - 11:30 a.m. - 2:00 p.m.



## Boy Scouts "Good Turn for America" Environmental Stewardship Event

Lake Springfield Pavilion

10:00 a.m. - 4:00 p.m. - Open to the Public

Contact: Howard Fisk 862-2900 (off.) or 773-3773 (cell)

## Educational Displays/Demonstrations Include:

- \*Ted Hilmer, Wilson's Creek National Battlefield- Fuel Efficient Transportation -- Hybrid Auto (afternoon)
- \*Don Wessel Honda - Fuel Efficient Hybrid Automobile
- \*Melvin Johnson, Springfield/Greene County Parks - Cave Program
- \*Jay Barber, Mo. Dept. Conservation-- Animal, Plant, Habitat Identification and Activities
- \*2nd & 1st Class Scout Advancement Activity & Kims Game "Scavenger Hunt"
- \*City of Springfield Public Grounds Division -- Alan Moore and City Utilities of Springfield, Roger Sieloff -- Tree Planting, Activities
- \*City of Springfield Solid Waste Management Division - Steve Matthews - Recycling Activity
- \*Leave No Trace --Gary Gift & Order of the Arrow - Leave No Trace - "Training & Planning for Certification"
- \*U.S. Forest Service - Gary Smith - Tree Identification & Habitats & Forestry Preservation
- \*Holly Neill - James River Basin Partnership - and Marsha Boone - Missouri Department of Natural Resources - Water Sampling Training/ Demonstration
- \*Ozark Greeways, Inc.

## Treekeepers Planting Activities

Fullbright Landfill

Contact: Ozark Greeways, Inc. - 864-2015

## Friday, April 29

**Jordan Valley Park Tree Mural**

Coordinated by Ozark Greenways, Inc. Contact: 864-2015

## Saturday, April 30

**Neighborhood Clean-up--SMSU**

Contact: Community Partnership of the Ozarks--888-2020



**Nov. 18, 2004**

**News Release**

*For Immediate Release*

**Citizens Reminded to "Protect Our Waterways"**

The City of Springfield has placed "Protect our Waterways" signage at 27 stream crossings on Fassnight, Galloway, Jordan, South, and Wilsons Creeks and Ward Branch.

The Storm Water Services Division of Public Works initiated this project as part of an educational effort to raise public awareness about protecting the water quality of our urban streams.

"We want to encourage the public to recognize that our urban streams are a valuable water resource providing natural habitat and recreational opportunities for our community to enjoy," says Todd Wagner, Principal Storm Water Engineer.

This effort is part of the educational component of the City's Storm Water Management Program. This program is required by the City's federally mandated storm water permit to reduce the discharge of pollutants from the storm water drainage system to area waterways.

For more information contact Todd Wagner or Carrie Lamb at the Storm Water Services Division of the Department of Public Works at 864-1901.

**Nov. 19, 2004**

**News Release**

*For Immediate Release*

**City Acquires Floodplain Area**

The City of Springfield has acquired 21 acres of natural floodplain area along Jordan Creek under its Floodplain Acquisition Program.

The area is bordered by Mount Vernon Street on the north, Grand Street on the south, Kansas Expressway on the east and railroad on the west. This important environmental protection acquisition is consistent with the goals of the Vision 20/20 Plan.

The land was acquired from Naremco, Inc., for \$119,000 using funds from the voter- approved Level Property Tax for Storm Water Improvements.

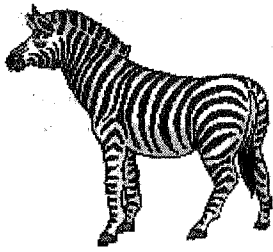
“We appreciate Naremco’s cooperation in making this acquisition,” said Todd Wagner, Principal Storm Water Engineer in Public Works.

The property is predominantly covered by forest. The acquisition will ensure the riparian corridor remains to provide natural flood control, water-quality enhancement, wildlife habitat and a future greenway trail.

“Preserving this property as a natural riparian corridor of Jordan Creek will help protect water quality and be a source of enjoyment for the community for years to come,” Wagner said.

For more information, contact: Todd Wagner, Principal Engineer, Public Works Storm Water Services Division, 864-1901.





## VOLUNTEER?

Friends of the Zoo is recruiting volunteers for the Zoo Ambassador and Docent programs. Please request a brochure and application by calling the zoo office, 417-833-1570, or emailing [info@dickersonparkzoo.org](mailto:info@dickersonparkzoo.org).

All prospective volunteers will complete an application and interview process. Training for those accepted into the programs will be during winter 2005 in preparation for spring activities.

## STORMWATER RUNOFF VIDEO AIRS ON WEATHER CHANNEL

The Environmental Protection Agency aired a half-hour television special showing the connection between weather and watersheds and the importance of watershed protection on The Weather Channel. "After the Storm" explores how polluted runoff threatens the nation's waters. There is also a companion brochure that can be downloaded from EPA's Web site for free.

To learn more go to  
[www.epa.gov/weatherchannel/](http://www.epa.gov/weatherchannel/)

VHS copies (available free for educational purposes) are available at the same web site.

## STORM WATER POLLUTION REPORTING

To report spills, dumping or discharges of pollutants to the storm water system or streams, or other water quality problems in Springfield, call the Storm Water Services Division at 864-1901 or submit a Citizen Service Request at [www.springfieldmogov.org/webapps/serv\\_reg/](http://www.springfieldmogov.org/webapps/serv_reg/)

What to watch for:

- ◆ Dumping of motor oil or other chemicals in streets, ditches or storm drains
- ◆ Discharges of commercially generated wash waters (e.g. from washing of trucks, equipment, structures, or from services such as carpet cleaning) to the street and/or storm drains
- ◆ Improper outdoor storage of chemicals and other materials that can pollute storm water runoff
- ◆ Disposal of grass clippings, leaves, or other yard waste in streets or ditches
- ◆ Sediment discharging from construction sites, or other erosion problems (for construction site erosion contract the local MDNR office at 891-4300; for waterways erosion, contact Springfield Public Works Waterways Maintenance at 864-1470.)

## STORM WATER WEB PAGE

Visit the City of Springfield Storm Water Services Division web page to learn about what the Division does, the basics of storm water, and the requirements of Springfield's NPDES storm water permit. View the interactive storm water map, meet the Division staff, and download a variety of storm water documents.

[www.springfieldmogov.org/stormwater](http://www.springfieldmogov.org/stormwater)

## WATER QUALITY VIDEOS

The following videos are available for checkout from the City's Storm Water Services Division for use in classrooms or by other groups interested in water quality issues. Contact Carrie Lamb at 864-1996.

"After the Storm" - Co-produced by EPA and The Weather Channel, this 22-minute video uses three case studies to focus on the issue of storm water pollution and the interconnections between water supply, water quality and the economic vitality and quality of life in communities.

"Keeping Our Waters Clean" - This video provides an easy-to-understand look at the Total Maximum Daily Load (TMDL) federal program to clean up impaired waterways. The full-length 45-minute program and a 25-minute version featuring nonpoint source pollution are both available.

## SMSU OFFERS NEW MASTER OF SCIENCE

SMSU is now offering a brand new Master of Science in geospatial sciences. The program is designed to provide professional training in geospatial science in the areas of geography and environmental geology, such as remote sensing, hydrology, climatology, water quality, and watershed management. This program also offers a thesis and a non-thesis option. For more information contact the Department of Geography, Geology and Planning at 836-5801 or 836-5800.

## STREAM TEAM RECEIVES RECOGNITION

The Springfield/Greene County Park Board's Stream Team - Kids F.A.C.E. (Kids For A Clean Environment) Programs recently received state-wide and national recognition.

Stream Team # 1732 headed up by Volunteer Lisa Orr in coordination with Melvin Johnson (Outdoor Initiatives & Youth Development Programs) was awarded the top Youth Leadership 2003 Team in Missouri in July.

The combined Stream Teams - Kids F.A.C.E. Programs received National "Colgate YOUTH FOR AMERICA HONORABLE MENTION" Community Service Recognition by the Colgate-Palmolive Company earlier this summer.

**Springfield-Greene County Choose Environmental Excellence 417-864-2006**

## Protect Our Waterways

The City of Springfield has placed "Protect our Waterways" signs at 27 stream crossings on Fassnight, Galloway, Jordan, South, and Wilson's creeks and Ward Branch.

The Storm Water Services Division of Public Works initiated this project as part of an educational effort to raise public awareness about protecting the water quality of our urban streams.

"We want to encourage the public to recognize that our urban streams are a valuable water resource providing natural habitat and recreational opportunities for our community to enjoy," said Todd Wagner, Principal Storm Water Engineer.

This effort is part of the educational component of the City's Storm Water Management Program. This program is required by the City's federally mandated storm water permit to reduce the discharge of pollutants from the storm water drainage system to area waterways.



Photo by Angela Henry

Pictured above is one of 27 "Protect Our Waterways" signs that were placed as part of the City's Storm Water Management Program. Below is a picturesque view of a crossing over Fassnight Creek near Bennett Street.

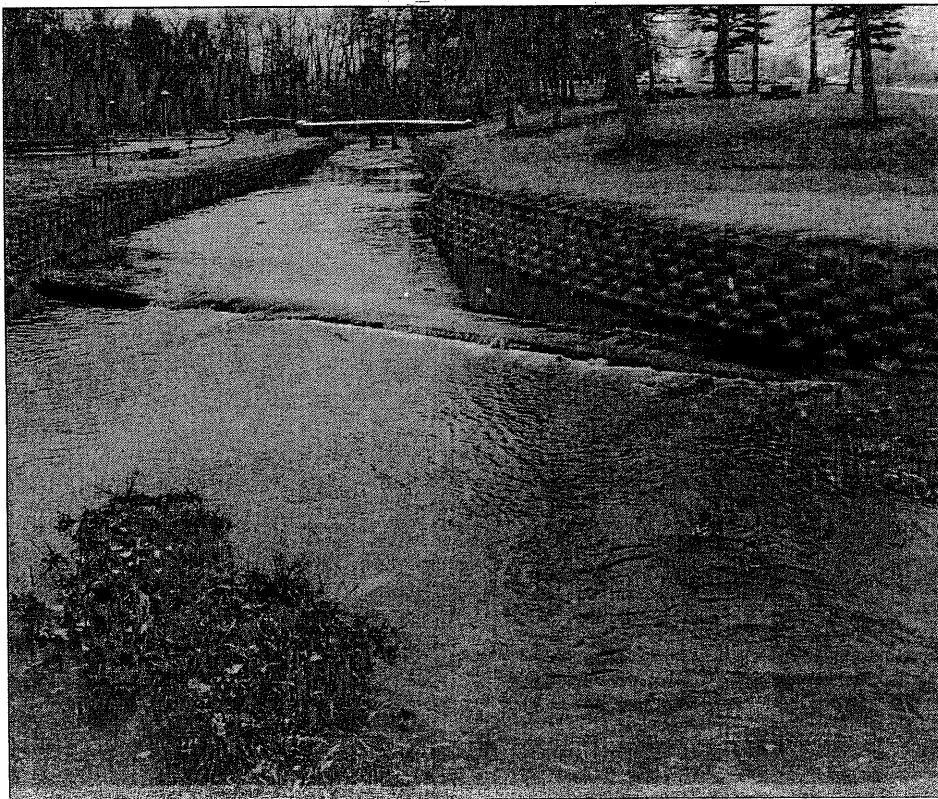


Photo by Angela Henry

## Springfield Acquires Floodplain Area

The City of Springfield has acquired 21 acres of natural floodplain area along Jordan Creek under its Floodplain Acquisition Program.

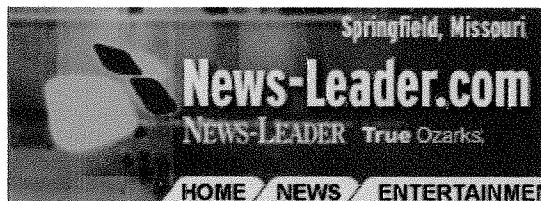
The area is bordered by Mount Vernon Street on the north, Grand Street on the south, Kansas Expressway on the east and the railroad on the west. This important environmental protection acquisition is consistent with the goals of the Vision 20/20 Plan.

The land was acquired from Naremco, Inc., for \$119,000 using funds from the voter-approved Level Property Tax for Storm Water Improvements.

"We appreciate Naremco's cooperation in making this acquisition," said Todd Wagner, Principal Storm Water Engineer in Public Works.

The property is predominantly covered by forest. The acquisition will ensure the riparian corridor remains to provide natural flood control, water-quality enhancement, wildlife habitat and a future greenway trail.

"Preserving this property as a natural riparian corridor of Jordan Creek will help protect water quality and be a source of enjoyment for the community for years to come," Wagner said.



HOME NEWS ENTERTAINMENT SHOPPING CARS JOBS REAL ESTATE APARTMENTS CU

**SITE SEARCH**

ARCHIVE

NEWS

ELECTION 2004

SPECIAL REPORTS

BUSINESS

ENTERTAINMENT

SPORTS

CLASSIFIED

LOCAL INFO

OBITUARIES

ANNOUNCEMENTS

MAGAZINES

OUTDOORS

HEALTH

FOOD

LIFE

OPINION

COLUMNISTS

BRANSON

CONTACT US

SITE MAP

Jobs

careerbuilder

Apartments

apartments.com

Real Estate

HomeFinder.com

Autos



Published September 24, 2004

## Splish, splash — kids get into water

*Students learn about water-quality issues*

By Mike Penprase  
News-Leader Staff

During a hands-on day to learn about the importance of water, Derrick Klinghammer wasn't overly disappointed one exhibit was hands-off.

That was the lidded aquarium holding a Northern water snake, part of an exhibit Dickerson Park Zoo reptile keeper David Kling took to "Make a Splash" Day at the Discovery Center.

For Klinghammer, a Westport fourth-grader, "the snakes and stuff" were the best part of the day.

The water snake got most of the attention from a group of 130 third- and fourth-graders who took part in the program. There were also reptiles and amphibians to see.

Kling said the water snake couldn't leave the aquarium because it has a temper and bites.

But that's no reason for people to kill the snakes in the mistaken belief they're venomous water moccasins or the like, the zoo keeper said.

"It's really a shame to do it," he told students crowded almost nose-to-nose with the animals on display or sitting in a mini-amphitheater. "They're just critters trying to make a living like everyone else."

Similar lessons were available throughout the center and outside, where several agencies had set up displays such as a sand table demonstrating how changing the flow of water in rivers and streams can cause erosion.



Greenwood Laboratory School students check out a model watershed at the Discovery Center on Thursday.  
Bob Linder / News-Leader



Steve Neilson declares the team to his left has the correct answer about the hazards of radon gas during "Make a Splash Day" at the Discovery Center.  
Bob Linder / News-Leader

The visit to the center reinforces classroom lessons about water-quality issues, Greenwood substitute teacher Shannon Sharp said as students from her school checked out the permanent display donated by the Watershed Committee of the Ozarks.

Classroom lessons are important, but seeing demonstrations about how human activity affects water quality reinforces that, she said.

Besides, cranking a handle to produce a rainstorm at the WCO exhibit lets students participate, she said.

"Kids are kinetic," she said as students crowded around the exhibit waiting their turn to spin a black handle that pumped water over a miniature landscape so it could fall as rain.

"They learn better doing hands-on."

The event is the only one of its kind in Missouri, said Cassidy White of the Discovery Center.

It's sponsored locally by the James River Basin Partnership, the Watershed Committee and Springfield Public Works and internationally by Nestle Corp. through its Project WET — for Water Education for Teachers — program.

The Missouri Department of Natural Resources, the Conservation Department and Americorps were also involved.

This year's event is considerably larger than Make a Splash Day in 2003, she said.

"Last year, we only had about 60, so we've doubled our numbers," she said.

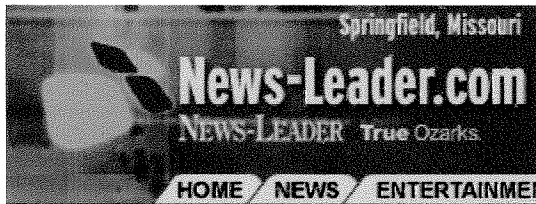
Students won't be the only ones benefiting from the visit, Partnership executive director Holly Neill said.

"We're also sending a lot of information home with the teachers," she said.

Like her Greenwood counterpart, Westport fourth-grade teacher Lisa Rice said the day helps students better understand the importance of water quality.

"It gives them more hands-on, seeing the more scientific things that are going on," she said.

"Instead of seeing it in a book, they actually get to see it."



HOME NEWS ENTERTAINMENT SHOPPING CARS JOBS REAL ESTATE APARTMENTS CU

SITE SEARCH

ARCHIVE

NEWS

ELECTION 2004

SPECIAL REPORTS

BUSINESS

ENTERTAINMENT

SPORTS

CLASSIFIED

LOCAL INFO

OBITUARIES

ANNOUNCEMENTS

MAGAZINES

OUTDOORS

HEALTH

FOOD

LIFE

OPINION

COLUMNISTS

BRANSON

CONTACT US

SITE MAP

Jobs

careerbuilder®

Apartments

apartments.com™

Real Estate

HomeFinder.com

Autos

cars.com™

Published September 25, 2004

## After 20 years, Ozarks seeing water issues more clearly

*Watershed Committee logs successes, looks to future*

By Mike Penprase  
News-Leader Staff

Surrounded by enthusiastic schoolkids at the Discovery Center in downtown Springfield, Stacey Armstrong asked them to back away, then placed a drop of acid on a chunk of limestone, which began to fizz and froth.

The newest member of the Watershed Committee of the Ozarks staff was showing kids a speeded-up version of how rainwater creates sinkholes, caves and channels in Ozarks limestone.

At the same time, dump trucks carrying silt from the upper end of Valley Water Mill Lake at the city's northeast edge rolled down the road in a cloud of dust.

Both events indicate that after 20 years, the Watershed Committee continues its mission of helping protect Springfield's water supply — a growing job as development accelerates around Fellows and McDaniel lakes and as some areas experience falling groundwater levels.

While Armstrong and two co-workers carried on the effort to educate youngsters about water-quality issues, the dump trucks were signs the committee is heading down a similar road to educate architects, builders and contractors on how to keep water supplies clean.



Dave White, program coordinator for the Watershed Committee of the Ozarks uses a water-quality meter to test the water at McDaniel Lake. The committee has helped the region understand the importance of water quality.

Edmee Rodriguez / News-Leader



Crews remove sediment from the bottom of a drained Valley Water Mill lake as part of Watershed Committee of the Ozarks' building project Thursday afternoon.

Christina Dicken / News-Leader



Mark Harris (left) and Todd Stranghoener canoe at Fellows Lake. The Watershed Committee of the Ozarks has been instrumental in raising area awareness about the importance of clean water.

Edmee Rodriguez / News-Leader

Many see as groundbreaking the committee's work with other agencies to turn the Valley Water Mill area into a place where it can demonstrate "green" building techniques and other ways to protect water.

For some, the work is inspiring.

"It's great to have these groups like the Watershed Committee because they're a great resource to use," James River Basin Partnership executive director Holly Neill said. "By binding together, we've become a lot stronger."

The committee deserves credit for raising water quality as an issue and keeping it in the public's mind, Drury University and water-quality expert Steve Jones said.

"They have been a major player in that," Jones said. "They've helped us all understand that what we do in the watershed directly affects the stream. You can't separate the stream from the watershed."

The Watershed Committee has united various groups involved in water-quality issues by including business and industry representatives on its board, said James Gulliford, U.S. Environmental Protection Agency Region 7 administrator.

Gulliford, whose agency oversees environmental efforts in Iowa, Nebraska, Kansas and Missouri, said he considers the Watershed Committee rather unusual.

"I wouldn't call it typical at all," he said. "I would call it more sophisticated than what I see in other places."

That's why the EPA is helping finance the Valley Water Mill project, said Gulliford, who visited the site in 2003.

"It's an important challenge to see how we grow ... in a way that's not detrimental to the natural resources, including water quality," he said.

### **Rocky start**

In the early 1980s, Springfield City Utilities created a task force to look at water-quality issues. But by 1984, what then was the Watershed Management Coordinating Committee seemed close to evaporating in a mist of political battling.

The committee's first director, Greene County Presiding Commissioner Dave Coonrod, was at odds with two county judges over the committee's financial survival and whether there was a need to be concerned about water quality. One judge contended septic tanks don't contribute to groundwater pollution, Coonrod said.



"We went to great lengths to prove septic tanks improperly installed and maintained will pollute the groundwater," he said of the results of one of the committee's first studies related to the area's Karst topography of springs, caves and sinkholes in dissolving limestone.

But the fighting continued, and Coonrod resigned, to be followed by another executive director who lasted a short time.

Coonrod never doubted the committee would survive.

"I always thought it was based on enough good science and had enough community support detractors would be hard-pressed to pull the plug on it," he said. "... You can hardly argue with the facts; they were beyond dispute."

While those facts originally were to be used to create water-quality regulations, the committee was transformed into an advisory group by the time it got its current name and a new director, Loring Bullard.

Becoming advisory rather than regulatory means the committee is a "white hat," even though it also means it doesn't become embroiled in controversies, Bullard said after 15 years as director.

The committee deserves credit not only for encouraging the creation of the James River Basin Partnership, the Upper White River Basin Foundation and Table Rock Lake Water Quality, but also for convincing an increasing number of farmers that taking part in programs it administers can help the environment and their own economic bottom lines, he said.

### **Much left to do**

The Valley Water Mill project will bring changes for the group, but the committee's basic mission will stay the same, committee chairman Dave Sturdevant said.

"What we've been doing for the last 20 years is going to continue," he said. "Valley Water Mill is going to be a piece of this. It will allow us to expand quite a bit more, and not just talk about best management practices, but demonstrate them and show them.

"This will make what we do a little more visible. What we'd like to do is reach out to contractors and the architects. We'd like to be able to make it kind of an understanding among the architects — and they're getting much, much better at that — that they should put in more features that are more environmentally responsible."

Bullard acknowledges that while the mission won't change, not all of the committee's efforts have succeeded.

For example, attempts to back creation of a water-protection group for Stockton Lake haven't yet taken hold. That's partly from not having a driving force in Stockton pushing for it, and partly because Stockton Lake's water quality remains good, Bullard said.

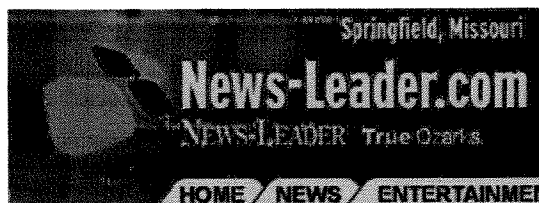
"Part of it may be we didn't sell it as vigorously as we should have, as far as the other benefits that can be had by forming a watershed group," he said.

Overall, Bullard believes a group with a staff of five people and a budget of \$200,000 has become important to the community.

Out of curiosity several years ago, Bullard estimated the per-capita cost of the committee.

"It's kind of like every citizen of Springfield paying a dollar a year to have us around," he said. "I would hope most people would think it's worth a dollar a year."

Copyright © 2004, The Springfield News-Leader, a Gannett company.  
Use of this site signifies your agreement to the Terms of Service (updated 12/17/2002).



HOME NEWS ENTERTAINMENT SHOPPING CARS JOBS REAL ESTATE APARTMENTS CUI

SITE SEARCH

ARCHIVE

NEWS

ELECTION 2004

SPECIAL REPORTS

BUSINESS

ENTERTAINMENT

SPORTS

CLASSIFIED

LOCAL INFO

OBITUARIES

ANNOUNCEMENTS

MAGAZINES

OUTDOORS

HEALTH

FOOD

LIFE

OPINION

COLUMNISTS

BRANSON

CONTACT US

SITE MAP

November 21, 2004

## Street signs let drivers know what creek they're crossing

*Signs were put up to educate public; many drivers confuse streams with drainage ditches.*

By Mike Penprase  
News-Leader

Crossing Jordan Creek and other Springfield streams has become more apparent with an effort to put signs on streets at stream crossings to educate the public about their role in water quality.

What could be the first phase in an effort to identify area streams involves placing green-and-white signs with streams' names on them throughout the city.

If they didn't know it before, drivers on West College Street are discovering they're crossing Jordan Creek near Kansas Expressway, now that Public Works employees have erected signs to that effect.

The same is true for drivers crossing Fassnight Creek at Grant Avenue on the edge of Fassnight Park.

Signs where roads cross South Creek and other city streams also have been put up recently, said principal stormwater engineer Todd Wagner.

"Just simply to raise awareness of the major creeks in town, so drivers will recognize them as creeks, and not large drainage ditches," he said.

Signs also have been put on bridges crossing Wilson's Creek and Ward Branch.

The stormwater division staff thought letting people know the names of creeks they're crossing would mesh with meeting public-education requirements that are part of complying with the city's federal stormwater permit, he said.

The permit requires the city to monitor stormwater and educate the public about keeping stormwater clean.

Eventually, the city will have to implement measures to improve stormwater quality, from cutting chemicals in the water to trash floating into streams during storms.

Jobs

careerbuilder\*

Apartments

apartments.com

Real Estate

HomeFinder.com

Autos

cars.com

In what Wagner said is the first phase of what could be a continuing effort, signs at 27 crossings have been installed.

A total of 54 signs — one for each direction of traffic — were made by the department's sign shop for about \$4,700, stormwater technician Carrie Lamb said. The signs measure either 24 inches square or 30 inches square.

There have been similar signs where some highways in Springfield cross streams; the city's effort does the same on city streets, Wagner said.

In the future, the signing effort may expand to include other streams, possibly through cooperative efforts with the Missouri Department of Highways and Transportation and Greene County, he said.

Wagner said he's concluded that knowledge about urban streams varies.

"A lot of the calls I get, they'll say 'You know that big ditch on Sunset?'" Wagner said.

In fact, that's South Creek running west from National, parallel to Sunset Street.

He agrees people need more education about Springfield's streams, Watershed Committee of the Ozarks executive director Loring Bullard said.

Public Works employees put up signs notifying drivers they were traveling over Jordan Creek near the committee's office on Main Street where the creek emerges from an underground channel.

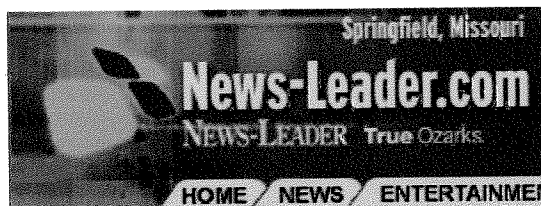
"I bet you'd be amazed how many people don't know the creek is there who have driven this street a thousand times, because they don't see it," he said.

The project makes sense, Bullard said.

"It's a good move," he said.

It's important to teach people they're not just driving across drainage ditches, but streams because of where the water in those streams goes, Wagner said.

"The water goes into the James River, and Table Rock Lake," he said.



HOME NEWS ENTERTAINMENT SHOPPING CARS JOBS REAL ESTATE APARTMENTS CUS

SITE SEARCH

ARCHIVE

NEWS

ELECTION 2004

SPECIAL REPORTS

BUSINESS

ENTERTAINMENT

SPORTS

CLASSIFIED

LOCAL INFO

OBITUARIES

ANNOUNCEMENTS

MAGAZINES

OUTDOORS

HEALTH

FOOD

LIFE

OPINION

COLUMNISTS

BRANSON

CONTACT US

SITE MAP

Jobs

careerbuilder®

Apartment

apartments.com™

Real Estate

HomeFinder.com

Autos



November 28, 2004

## Change in an urban wilderness

*Wildlife finds a haven in 21 acres purchased for greenway*

By Mike Penprase  
News-Leader Staff

Bolstered by days of rain, the creek water rumbles over rocks, sweeps past fallen trees, and then slows in deep pools.

Footprints left by foraging raccoons decorate sandbars; farther up, tracks in the wet soil reveal deer use the woods along the creek as a haven.

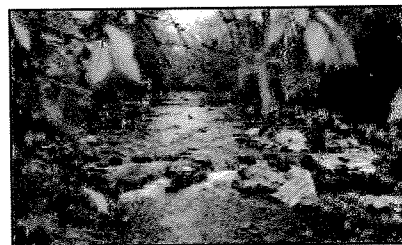
But the spot isn't in the middle of a forest. It's Jordan Creek as it flows in a half-mile stretch west of Kansas Expressway between Mount Vernon Street and Grand Street.

While the stream has its share of urban debris ranging from plastic bags caught in bushes to castoff bicycles and air conditioners, the creek's character changes enough after it flows under Kansas Expressway that there are chances to see signs of wildlife in the middle of the city.

And now that Springfield Public Works has bought the 21 acres between the expressway and the Union Pacific tracks used by the Missouri and North Arkansas Railroad, the land is safe for deer, raccoons and other wildlife.

It's yet another piece in a plan to create a greenway trail along the creek through the center of Springfield.

### Buying land



Jordan Creek flows through the 21-acre parcel of land west of Kansas Expressway that was purchased by the city.  
Bob Linder / News-Leader



Berries add a touch of color in the wooded area.  
Bob Linder / News-Leader



'Unofficial' trails that cut through the parcel of land could be used in creating the proposed greenways trail.  
Bob Linder / News-Leader

The possibility of change for what is an urban wilderness in the middle of Springfield arrived when a yellow for-sale sign rose months ago at Kansas Expressway and Grand Street.

Instead of being sold for development, the land went to the city's Department of Public Works. It paid landowner Naremco Inc. \$119,000, using funds from the department's stormwater improvement property tax revenues.

The purchase meshes with other projects involving the much-maligned creek, from a plan to remove covered channels on North Jordan Branch between Smith and Silver Springs parks, to working with the U.S. Army Corps of Engineers to assess the urban stream's potential redevelopment.

Buying the land is part of the city's effort to acquire land that's in flood plains, said Harry Price, stormwater division director.

Along with preventing building in flood-plain areas, the purchase is part of an effort to improve stormwater quality and to create greenway trails in the city, he said.

Other than the trail, the land won't be further developed, he said.

"This will preserve its natural state," he said. "It's an obvious area for a greenways trail to come up along Jordan Creek. I think it's a tremendous boost to our linear park system, as well as it will protect people downstream from further development of the flood plain."

### **More purchases?**

Although the Department of Public Works has no immediate plans to purchase more property bordering the creek, it is on the lookout for opportunities as they arise, Price said.

"We try to watch the real estate market for flood plain that would become available," he said. "We try to work with the landowners."

Although much of that land is occupied by a variety of businesses, the area also has links to Springfield's early history.

### **Historic site**

The city of Springfield recently acquired 21 acres of land for greenways.

At the north end of the property just off Mount Vernon Street, a University Club marker notes part of the property's historical significance, noting a Civil War cavalry charge that took place there in 1861.

The marker says: "Late at night Oct. 26, 1861. Maj. Charles Zagonyi, commander of Fremont's body guard, with 300 men, including 130 of Maj. White's Prairie Scouts, left Fremont's camp near Bolivar to attack a Confederate force at Springfield. On the 25th, they detoured about a mile west of the present Frisco station to effect a surprise from the west. The Confederates, probably 1500, encamped on the hill and in this valley, were warned and ready, but Zagonyi, dividing his forces, repeatedly charged until the enemy retreated to the east and south. Zagonyi reorganized the remnant of his force on the public square and provided care for the wounded before leaving to rejoin Fremont's command."



On the west side of the creek valley on Mount Vernon, a limestone historical marker notes Greene County's first school was built just to the south in 1831, with children from several families taught by Joseph Rountree.

The Department of Public Works also will be involved in assessing what needs to be done in the heavily wooded area to make it safe for trail users, Price said.

Public grounds operations superintendent Joe Payne said he'll study the area's needs after Ozark Greenways and the Springfield-Greene County Parks Department come up with a trail plan.

"Once we know more or less what their intentions are, we can blaze a rough trail through to see what trees are impacted," he said.

### **Planning a trail**

Several years ago, Ozark Greenways executive director Terry Whaley walked through the area in anticipation of a trail being created.

"I've walked the middle and both sides of it, looking for possibilities," Whaley said. "We have it on our to-do list to go out there and decide whether the best side for a trail is the east side or the west side of the creek."

One task might be to determine whether existing trails can be used.

While one unofficial trail runs the length of the property through a wooded area covered by a dense carpet of vegetation, others lead to the creek or loop through the woods.

The purchase comes at a good time because parks planner Jerany Jackson is working on a plan for the proposed dog park at Loren Park to the south that includes a section of greenway trail, Whaley said.

Whaley said the purchase shows how city funds can be spent for not just one, but for several purposes.

"I always like the idea we can spend taxpayers' money once, but get two or three uses out of it — it's a good deal for everybody," he said.

# News-Leader.com

Springfield, MO

Tuesday, February 22, 2005

HOME NEWS ENTERTAINMENT LIFESTYLE SPORTS BUSINESS OPINIONS COMMUNITY ANNOUNCEMENTS CLASSIFI  
Nation/World Special Reports Branson Education NIE Politics Road Watch School Closings Stewardship Oza

## stewardship ozarks

Published Sunday, February 20, 2005

### Rethinking old standards of storm drainage

By Mike Penprase  
News-Leader

Each day, Don Nix drives his street sweeper 10 to 20 lane miles, crawling along at 4 1/2 mph.

But the Springfield Public Works employee is doing more than making city streets look nice. It's part of the city's overall plan to meet increasingly stringent stormwater runoff regulations — regulations designed to help maintain the quality of the region's waterways.

An estimated 11.7 billion gallons of stormwater — enough to fill 22,000 Olympic-size pools — flows in Springfield streams during years with average rainfall, according to a recent report from the Public Works Storm Water Division.

And if that water picks up raked leaves, litter and other waste from yards and roadsides as it flows through the city, the pollution eventually makes its way into area waters.

Now, Springfield spends just over \$500,000 on its stormwater program to pay employees, coordinate operations with street and sewer operations, and monitor water quality.

The cost of implementing a new program to meet the requirements of



Brian Cizek cuts steel rebar that was used to reinforce a concrete storm-drainage tunnel on Lynn Street. Removing it is part of a project to restore Jordan Creek's North Branch to a more natural state. An occasional series on our environmental health

Noppadol Paothong / News-Leader



A contractor working for the city is tearing apart a culvert that hides Jordan Creek from view near National Avenue and Lynn Street.

Noppadol Paothong / News-Leader



Dust flies as a sweeper scrubs the edge of a street, which helps keep pollution out of area waters.

the federal Clean Water Act could cost millions, though, and require a new government agency. The U.S. Environmental Protection Agency is phasing in stricter requirements, and failure to meet those requirements could bring fines or other penalties.

A "first preliminary" estimate for a public stormwater utility in Springfield is \$10 million a year — possibly from a sales tax, said Todd Wagner, city stormwater engineer.

But discussions are in the early stages, he said. "We're re-evaluating that now, and trying to fine-tune it."

### Public education

Educating the public about the need to have clean stormwater — and a utility to make it happen — will be a priority, Wagner said.

"We think we've come a long way in the last five years, but I don't think the general public fully understands it," he said. "That could be something we do more of, as we develop plans to come up with, for example, how to address the bacteria problem."

Barbara Lucks, the city material recovery and education coordinator, knows the job won't be easy.

"It's a huge responsibility," she said. "Yet we are not going to effect the kind of change we want to see in our lakes and streams until we do this."

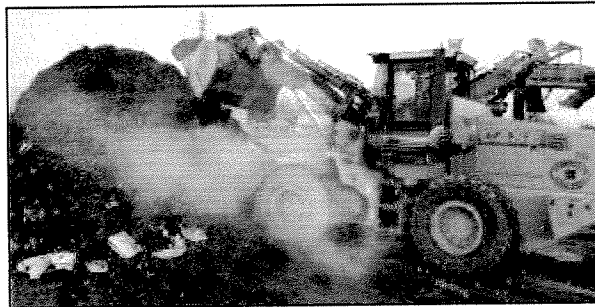
The city has tried everything from newsletters to inserts in City Utilities bills to inform people that dumping leaves in gutters is a thing of the past, one of the culprits of what's known as nonpoint source pollution, Lucks said.

Dean Curtis / News-Leader



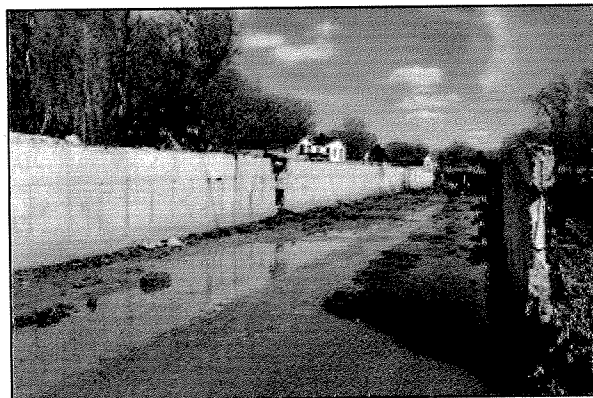
Cars slough through water in a low-lying area along Kimbrough Avenue near Delmar Street.

News-Leader File Photo



A city worker in a front-end loader piles dirt, trash and debris picked up by street sweepers. The city works to educate people about such things as not dumping leaves in gutters.

Dean Curtis / News-Leader



Engineers have concluded that holding streams in concrete channels, like this one at National Avenue and Lynn Street, speeds up water flow and contributes to flooding downstream.

Noppadol Paothong / News-Leader



Don Nix (in the street sweeper on the left) cleans a street while a second sweeper heads out from the Springfield Public Works department's facility.

"We've worked really hard to get that message out, and people — they're still not aware of it," she said.

Dean Curtis / News-Leader

## MORE ABOUT THIS STORY

### Springfield's stormwater program

Working with groups such as builders needing information on controlling construction runoff is one thing; convincing thousands of homeowners they may not need to use as much fertilizer as they think is another, she said.

"You begin talking about people's yards, and you have a shotgun effect," she said. "You have a huge number of people to reach."

That's why Lucks was at this weekend's Lawn and Garden Show, talking to people about the Show Me Yard and Neighborhoods program, which provides information on proper fertilizer and lawn chemical use, and other issues. Many fertilizers contain phosphorus, which can lead to an overgrowth of algae in area lakes and rivers.

### A variety of voices

Water-quality officials aren't the only ones talking about stormwater issues.

Matt Morrow, executive director of the Home Builders Association of Springfield, participates in a group of local businesspeople meeting with Springfield and Greene County officials to discuss the topic.

Morrow said complying with federal regulations will be inevitable, and it's better to work with local officials now.

The next phase of the EPA's stormwater regulations has significant requirements that will likely affect how builders operate, he

Much work has been done since Springfield's stormwater program started in the 1990s. Examples cited in the city's National Pollutant Discharge Elimination System Municipal Separate Storm Water Sewer System report:

- Since voters approved a level property tax in 1995 and in three subsequent elections, the city has spent \$56 million for flood plain acquisitions and capital projects, including best management practices, water-quality projects and stream-bank stabilization.

- The city is working with the U.S. Army Corps of Engineers to study the feasibility of reducing flooding and improve the environment of Jordan Creek in downtown Springfield, including the possibility of removing parts of the enclosed culvert covering the creek. The city is sharing the \$3 million cost of the study with the Corps.

- Since 1995, the city has spent \$15 million on an infiltration and inflow program to reduce the amount of stormwater entering the city's sanitary sewer system. The program has resulted in rehabilitating over 60,000 feet of sewer lines and 11,855 manhole covers.

- In its first year, the street sweeping program collected 1,455 tons of seeping and 2,954 cubic yards of leaves that were composted.

Along with having 47 routes running over 980 curb miles in its street sweeping program, Public Works checks for and removes debris at bridges, sinkholes and stormwater grates on streets.

Crews have a bridge route with 10 priority locations, a sinkhole route with 12 priority locations, a waterways route with 85 priority locations and 12 street grate routes with 1,700 priority locations. From December 2003 to June 2004, debris was removed from 12,725 locations.

### What's the issue?

Complying with the federal Clean Water Act could cost millions.

How do we fix it?

Bioengineering methods could create less flooding of streams.

What can you do?

Become informed on the ways we pollute without realizing it.

### For more information

Information on the Storm Water Division's stormwater report for 2003-2004 and other documents related to stormwater

said. "Some of them are valuable and useful, and others are kind of typical of federal government reports."

issues in Springfield is online at  
[www.springfieldmo.gov/stormwater](http://www.springfieldmo.gov/stormwater).

Springfield was the first large city to start work on a stormwater program in Missouri, and that means it has progressed further than Kansas City and Independence, said Ralph Summers, EPA Region 7 National Pollutant Discharge Elimination System coordinator.

When it comes to dealing with stormwater, there's a distinction between programs for municipal stormwater systems and construction runoff, he said.

That's why there's so much concern among builders about new regulations, he said. But educating the public about municipal stormwater programs remains important.

Springfield residents likely will hear more as the city's effort to comply with federal stormwater quality standards approaches the implementation phase.

Now monitoring stormwater quality to track trash, sediment, nutrients and bacteria, the city is scheduled to start a full-blown program to clean up water entering the James River and eventually Table Rock Lake in two years.

### **County cooperation**

It's possible Springfield won't go it alone.

Springfield and Greene County officials are discussing forming a city-county stormwater utility and have talked to business people in preparation for putting a way to finance a stormwater program before voters.

At the same time, Greene County received a federal grant to use different methods to control erosion in a section of Ward Branch. The idea: to see whether the techniques work and to have a demonstration area for builders and developers.

Greene County Resource Management Director Tim Smith sees city-county cooperation as a logical step.

The stormwater report — which tracks progress in developing the city's Municipal Separate Storm Sewer System Permit — traces how programs ranging from the city's vision-planning project to public-education programs play a role in the effort, he said.

"It proposes some pretty far-reaching measures which we feel are needed," Smith said. "Among those potentially are the merger of the city and county programs."

Dealing with stormwater also means some long-held engineering philosophies will give way.

At Lynn Street and National Avenue, a contractor working for the city is tearing apart a culvert hiding the North Branch of Jordan Creek from view as it runs west from Fremont Avenue to National Avenue. The project is an example of the relatively new field of bioengineering.

### **A new way**

Engineers have concluded that holding streams in concrete channels speeds up water flow and contributes to flooding downstream. Bioengineering allows streams to act more naturally, lessening flooding, project engineer Derek Lee said.

Shifting to bioengineering has meant some re-education for engineers, the city's Wagner said. Engineering solutions that resulted in creeks being buried — such as Jordan Creek in downtown Springfield — are viewed as outmoded.

"It's a lot different approach than when Jordan Creek was closed in," he said. "The easy way is to build a concrete channel, but now we're looking at the whole system. That's why you say bioengineering is the better way to go when it comes to the whole system."

Instead of forcing a stream to follow an artificial channel, it's better to allow a waterway to follow its own course when possible, he said.

The project's initial phase will return the North Branch to a more natural state from Silver Springs Park and National to Prospect Street; the second phase will move east to Sherman Avenue and Smith Park, Lee said.

But the project that will include a greenways trail causes uneasiness for people like Natalie Mosley.

She shares a house with her mother across Prospect from where heavy equipment is tearing apart the 6-foot-high culvert and cutting away dirt to widen the creek channel. The home is on the northern edge of the project's second phase.



Along with construction that prompted one neighbor living across the street to move, Mosley said she's concerned about including a greenways trail in the project, and the prospect of strangers walking past her home.

"We've been living here a long time," she said. "We don't want it because we don't know what the outcome will be on this channel. We don't know how it's going to turn out."

---

[Customer Service](#) | [Feedback](#) | [Site Map](#) | [Work for the News-Leader](#) | [Terms of Service](#)

[USA Today](#) | [USA Weekend](#) | [Gannett](#) | [Gannett Foundation](#) | [NIE](#) | [Parent and Family](#)

[Find a Job](#) | [Find a Car](#) | [Find a House](#) | [Find a Rental](#) | [Find a Date](#) | [Go Shopping](#) | [Classifieds](#)

Copyright © 2005, The Springfield News-Leader, a Gannett company. Use of this site signifies your agreement to the Terms of Service.



# News-Leader.com

Springfield, MO

Tuesday, February 22, 2005

HOME NEWS ENTERTAINMENT LIFESTYLE SPORTS BUSINESS OPINIONS COMMUNITY ANNOUNCEMENTS CLASSIFIED

Blogs

Columnists

Our View

Ozarks Voices

Ozarks Poll

Readers' Letters

## ozarks opinions

Published Tuesday, February 22, 2005

### Now, it's up to you to clean streams

*Stormwater utility aims at the next, harder step.*

The easy part has been done. Tighter and tighter restrictions have been placed on municipal sewage plants to protect Ozarks water quality. Mandated phosphorus removal has reduced the algae bloom on the lower James River and Table Rock Lake.



The James River, where runoff from Springfield eventually ends up.

News-Leader File Photo

But Ozarks streams are not yet as clean as they need to be. Favorite swimming holes routinely are measured with dangerous levels of E. coli bacteria, especially after heavy rains.

Going that next step is the hard part.

It is the effort to get individuals to change their habits — and building safeguards against those who won't. And it's likely to come at the price of a local tax increase that won't be easy to define.

For years, city leaders have talked about the need for a stormwater utility. Eyes have predictably glazed over, especially when the terms of the discussion are generally big Latin-based words like "impervious" and "riparian." The one time people paid attention was when the city proposed taxing roofs and parking lots — impervious surfaces — to pay for the cost of controlling stormwater and preventing flooding. They forcefully rejected the February 1994 ballot issue.

The issue is bubbling up again, but it's no longer simply about keeping flood water out of basements. Now, the federal Environmental Protection Agency is moving toward requiring rainfall runoff to meet clean-water standards. That will take money.

City and Greene County leaders are talking about the best way to raise the \$10 million a year they estimate they'll need. The money would be used to improve the stormwater system, which carries an estimated 11.7 billion gallons of runoff a year, and ratcheting up educational campaigns.

The latter is particularly important. Removing fertilizers, engine oil, paint and other substances from stormwater is expensive. Keeping them from getting into the water in the first place isn't — but it requires an understanding that individual actions can combine for good or bad.

For instance, dumping two bags of fertilizer on your yard instead of half a bag doesn't guarantee a greener lawn. The soil will take what it needs, and the rest will be washed away.

Your extra bag may not make that much of a difference. But multiply your bag by thousands or tens of thousands of homes, and local streams will quickly fill with oxygen-robbing algae.

The EPA isn't going to crack down on excessive residential fertilizer. It isn't going to send agents to spy on what shade-tree mechanics do when they change their own oil. But it is likely to set limits on what can flow into local creeks and streams, which takes us back to the choice: Do we pay a lot to remove pollutants, or do we individually change our habits to prevent pollution?

It seems like an easy answer, but experience shows that getting there is hard. When city officials start talking about stormwater utilities, and your eyes begin to glaze over, realize this is what they're really talking about: What are you going to pay, and how are you going to pay it?

---

[Customer Service](#) | [Feedback](#) | [Site Map](#) | [Work for the News-Leader](#) | [Terms of Service](#)

[USA Today](#) | [USA Weekend](#) | [Gannett](#) | [Gannett Foundation](#) | [NIE](#) | [Parent and Family](#)

[Find a Job](#) | [Find a Car](#) | [Find a House](#) | [Find a Rental](#) | [Find a Date](#) | [Go Shopping](#) | [Classifieds](#)

Copyright © 2005, The Springfield News-Leader, a Gannett company. Use of this site signifies your agreement to the [Terms of Service](#).



## Program aims to keep streams clean

*Adopt-A-Stream may help keep trash from flowing into James River and other waterways.*

By Mike Penprase  
News-Leader staff

Accustomed to litter cleanups on city streets, Springfield residents will see signs sprouting in an Adopt-A-Stream effort.

Not only will the program give people who want to improve Springfield's appearance another outlet for volunteering, it will help the city meet federal stormwater regulations.

People like James River Basin Partnership executive director Holly Neill hope enough urban streams are adopted to make a difference in the amount of trash flowing downstream toward the James River and other waterways.

"I think the more people we can get involved in the program, the more ahead we're going to be, just like the Adopt-A-Street program has helped tremendously," said Neill. "I think this is a really interesting project, and will help people understand how much trash is being generated and ending up in our urban streams.

Kay Johnson and other members of the Greater Ozarks Audubon Society know what kind of dedication is involved.

For the past six years, Johnson and society members have cared for a



South Creek is cared for by the Greater Ozarks Audubon Society. The group's effort was a model for the new Adopt-A-Stream cleanup program.

Dean Curtis / News-Leader



### TODAY'S COVERAGE

- Program aims to keep streams clean
- Nixa likely to adopt impact fees
- Court: Right to bear arms not absolute
- Briefs: Judge orders hearing in rape case
- Senate votes to limit mercury in childhood vaccine
- Ozarks Food Harvest conference focuses on making a difference
- Around the Ozarks: Police seize vehicle suspected

mile-long section of South Creek between National and Campbell avenues.

Habitat restoration and preservation are the prime goals, and the group encourages others to volunteer for litter removal, Johnson said.

He has concluded volunteer efforts like the new Adopt-A-Stream program need one major ingredient.

"What you need, I think, to pull a project like this off, is a group of people who are interested in various things, but you need a strong ramrod, for lack of a better word, to organize things and keep them going," he said.

Participation in the new program will require some commitment, said Public Works Storm Water Services environmental technician Carrie Lamb, who administers the effort.

Volunteers have to agree to clean a half-mile of urban stream three times a year, for instance.

Public Works will provide trash bags and pick up filled bags, she said.

Along with the Adopt-A-Street program, the Audubon effort was a model, Lamb said.

"We'd really like to give them all the recognition we can, because they have been doing it for so long," she said. "This Adopt-A-Stream program is strictly for cleanups."

The effort now is aimed at city-owned stream channels, she said.

"I've compiled an adoption list of stream sections that are accessible and safe," she said of half-mile sections that can be adopted. "There's lots of variety and opportunity."

Candidates include Jordan Creek between Mount Vernon and Grand streets, North Jordan Branch through Silver Spring Park, Fassnight Creek from Bennett Street to Grant Avenue and South Creek west of Campbell Avenue.

Volunteers won't monitor water quality, Lamb said.

"We didn't want to duplicate the Stream Team program, since they've already got such a good program," she said.

News-Leader.com | **True Ozarks**

Published Monday, May 16, 2005 Program encourages residents to clean up Ozarks streams

You can refrain from littering. You can make sure your friends don't throw trash out their car windows. But unfortunately, there's no way to stop all the garbage that finds its way to city streets and blows into our streams. What's more, our streams are not just ours.

Our streams and creeks flow into Ozarks rivers that flow into our lakes. And the lakes are a major part of this area's tourism economy.

The city has created a new Adopt-a-Stream program to help encourage residents to get involved in cleaning up our streams and keeping them clean.

It's a program modeled on the city's Adopt a Street program and efforts of the Greater Ozarks Audubon Society to take care of South Creek.

We hope lots of organizations volunteer. The requirements are not overly taxing. Volunteers are asked to clean up a half a mile of stream at least three times a year. All the streams are on public property and there are varying degrees of difficulty.

"Some of those streams are really for the more rigorous type person who doesn't mind being in a heavily forested stream area that's going to require getting in the water and wading around," said Carrie Lamb, a storm water technician with the city. For information on volunteering, call Lamb at 864-1996.

Copyright © 2005, The Springfield News-Leader, a Gannett Company.

[Click here to return to http://springfield.news-leader.com/opinions/today/20050516-Programencourag.html](http://springfield.news-leader.com/opinions/today/20050516-Programencourag.html)